CLAIMS

What is claimed is:

1. A controllable two-phase network for production of first and second output signals at respective first and second loads with at least approximately identical load impedances from an input signal from an at least approximately identical source, comprising:

a phase path for production of the first output signal from the input signal, said phase path including a first series circuit formed by

the first load having a first end connected to ground and a second end connected to first and second parallel branches,

the first parallel branch including a first source having a first side connected to ground and a second side connected in series to a trimming resistance, and

the second parallel branch including a second source having a first side connected to ground and second side connected in series to a trimming capacitance; and

an amplitude path for production of the second output signal from the input signal, said amplitude path including a compensation circuit, having an output, for matching the amplitude of the second output signal to the amplitude of the first output signal, the compensation circuit formed by

the second load having a first end connected to ground and a second end connected to the output of the compensation circuit, and

at least a third source, each having a first side connected to ground and a second side connected to an input of the compensation circuit.

2. The controllable two-phase network as recited in claim 1,

wherein each source includes a second series circuit formed by an ideal source and a non-reactive source resistance,

wherein the first and second loads each includes a non-reactive load resistance, and

wherein the compensation circuit includes a trimming resistance connected between the input and the output of the compensation circuit.

3. The controllable two-phase network as recited in claim 2,

wherein a factor β formed from a magnitude ratio of an output voltage with a value of one of U_P and U_A, to a voltage U_Q across the ideal source results at least approximately in $\beta = \left|\frac{U_P}{U_Q}\right| = \left|\frac{U_A}{U_Q}\right| \leq 1$,

wherein, depending on a value R_Q of the non-reactive source resistance, the trimming resistance has at least approximately a value of $R = R_Q \frac{1+\beta}{1-\beta}$, and

wherein the non-reactive load resistance has at least approximately a value of $R_L = R_Q \frac{2\beta}{(1-\beta)^2}$.

4. The controllable two-phase network as recited in claim 1,

wherein each source includes an ideal source,

wherein the first and second loads each includes a parallel circuit formed by a non-reactive load resistance and a load capacitance, and

wherein the compensation circuit includes a parallel circuit, connected between the input and the output of the compensation circuit, formed by the trimming resistance and the trimming capacitor.

5. The controllable two-phase network as recited in claim 4, wherein the trimming resistance has a value R considerably less than a value R_L of the non-reactive load resistance, and the trimming capacitance has a value C considerably greater than a value C_L of the load capacitance.

6. The controllable two-phase network as recited in claim 5, wherein the value R of the trimming resistance is α times the value R_L of the non-reactive load resistance, and the value C of the trimming capacitance is 1/α times the value C_L of the load capacitance.

7. The controllable two-phase network as recited in claim 1,

wherein each source includes a second series circuit formed by an ideal source and a non-reactive source resistance,

wherein each of the first and second loads includes a parallel circuit formed by a non-reactive load resistance and a load capacitance,

wherein the compensation circuit includes

the trimming resistance connected between a first input of the compensation circuit and the output of the compensation circuit,

the trimming capacitance connected between a second input of the compensation circuit and the output of the compensation circuit, and

third and fourth series circuits having first ends respectively connected to the first and second inputs of the compensation circuit and second ends connected to ground, the third and fourth series circuits each formed by a non-reactive resistance and a capacitance connected in series.

8. The controllable two-phase network as recited in claim 7, wherin the trimming resistance is variable.

9. The controllable two-phase network as recited in claim 8, wherein the trimming resistance contains a PIN diode.

10. The controllable two-phase network as recited in claim 7, wherein the trimming capacitance is variable.

11. The controllable two-phase network as recited in claim 10, wherein the trimming capacitance includes a capacitance diode.